



## New waste characterization study

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As part of its continuing efforts to assist jurisdictions in reaching and maintaining their waste management goals, the California Integrated Waste Management Board (CIWMB) approved a contract for a new waste characterization study at the May 2004 CIWMB meeting.

To ensure the results of this study would be useful to both jurisdictions and CIWMB policy makers, CIWMB Waste Analysis staff polled staff in other CIWMB branches and divisions, staff at the local government level, and consultants who work with local governments on waste management issues for ideas on what areas to target. Based on those inputs, as well as time and budget constraints, the targeted waste streams chosen include:

- Characterization of disposed and diverted waste from the most important types of businesses that are major sources of waste.
- Characterization of disposed residuals from materials recovery facilities.
- A detailed characterization of disposed construction and demolition (C&D) waste.
- A detailed characterization of waste disposed by the commercial self-haul sector, including drop boxes.

Additionally, the C&D waste portion of the study will include development of a method to characterize C&D loads using "visual" means (looking at the load and estimating the percentage of each material type) rather than physically sorting the individual materials. Also, a specific volume of each material type will be weighed to determine its specific weight (pounds/cubic yard) and develop volume-to-weight conversion factors for C&D materials.

Past waste characterization studies conducted by the CIWMB (1999 and 2003–04) have been statewide events, with sampling being conducted at businesses and disposal facilities randomly selected from all over the state.



**infoCycling** is published four times a year by the California Integrated Waste Management Board, 1001 I Street, P.O. Box 4025, Sacramento, CA 95812-4025.

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Publication #342-04-003  
August 2004

## ***New waste characterization study, continued from page 1***

To view past studies and other waste characterization information, go to the CIWMB's Solid Waste Characterization website at [www.ciwmb.ca.gov/wastechar/](http://www.ciwmb.ca.gov/wastechar/). This new study will be somewhat different in that sampling will be confined to four metropolitan areas of the State: San Diego area, Southern California/Los Angeles Basin, San Francisco Bay Area, and the Central Valley.

The prime contractor is Cascadia Consulting Group, which has a wealth of experience in conducting such studies. They are teamed with two other highly experienced companies, R.W. Beck and SCS Engineers.

Staff is excited about this new targeted study and looks forward to providing jurisdictions with information to make their job of waste management easier. The

study is currently in the design phase. Field work should begin in early 2005, with study completion due in spring 2006.



### ***Waste sorting***

For a more detailed explanation of what will be accomplished in this study, you can read the scope of work at [www.ciwmb.ca.gov/agendas/mtgdocs/2004/02/00015204.doc](http://www.ciwmb.ca.gov/agendas/mtgdocs/2004/02/00015204.doc). You may also contact Tom Rudy at (916) 341-6229, or e-mail him at [trudy@ciwmb.ca.gov](mailto:trudy@ciwmb.ca.gov) for additional information.

## **GrassRoots Recycling Network zero waste conference**

The GrassRoots Recycling Network (GRRN) is holding its first zero waste network action conference in Oakland, California, on **August 28, 2004**, from 8:30 a.m. to 5:00 p.m. The main session will be held at the Oakland Federal Building, and breakout sessions will be held at Oakland City Hall.

This one-day event is designed to give attendees overviews of zero waste and producer responsibility, in theory and in actual practice. The agenda combines expert panels, workshops, and hands-on planning sessions to transform

ideas into action. The main session will set the stage by presenting the history and context for zero waste. Breakout sessions include:

- Zero Waste in Action
  - Zero waste community plans and programs
  - Zero waste businesses
  - Extended producer responsibility (EPR) in practice

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*NRC Expo in  
San  
Francisco—  
August 29 to  
September 1,  
2004.*

### ***Zero waste conference, continued from page 2***

- Resource recovery parks
- Moving to Action
  - Zero waste community network
  - Plastics campaign
  - No new landfills campaign
  - No new incineration, pyrolysis or gasification

For more information about the conference, please contact Richard Anthony, GrassRoots Recycling Network, at (858) 272-2905, or e-mail him at [ricanthony@aol.com](mailto:ricanthony@aol.com). Or, visit the GRRN website at [www.grrn.org/](http://www.grrn.org/) and click on *Zero Waste Network Action Conference* or [www.grrn.org/conference2004/index.html](http://www.grrn.org/conference2004/index.html) for additional information, such as regular updates and registration information.

## **Venues recycling news**

Assembly Bill 2176 ([www.leginfo.ca.gov/cgi-bin/postquery](http://www.leginfo.ca.gov/cgi-bin/postquery)), requiring the largest sport/entertainment/civic venues and events in each community to begin planning for waste reduction and recycling, was passed by the California State Assembly and is now in the Senate.

Many cities, venues, and events are not waiting, however. New summer recycling initiatives around the state include the following:

- The small City of Isleton, population 850, started a new program this year. Isleton collects beverage containers and cardboard at their famous Crawdad Festival that attracts more than 150,000 visitors in a single weekend. The city's first try resulted in the recycling of almost 3 tons of material.
- Staff at the Network Associates Coliseum/Oakland-Alameda County Arena Complex is working on a new plan to recycle or compost 100 percent of the trash generated after every game and concert. The project

will include switching to biodegradable utensils, cups, and bags and making separate grounds pickups of trash and recyclables before sweeping down food and other compostables.

- The City of Oxnard's first effort to recycle at the Strawberry Festival was successful. More than 2 tons of materials were collected, including 74 percent of the beverage containers sold at the event. Event sponsor Coca-Cola provided recycling signage and stickers. Revenue from the sale of the recyclables was donated to local community assistance programs.
- The City of San Diego and the San Diego Padres have begun planning meetings for improved waste reduction and recycling at the just-opened Petco Park. The

***Continued on page 4***

***Venues recycling news, continued from page 3***

Padres' goal is to significantly expand on the limited recycling program at their old venue.

Want to see a venue program in action for yourself?

The National Recycling Coalition (NRC) Expo in San Francisco will offer professional tours of composting and recycling programs at the Giants' SBC Stadium, the Moscone Convention Center, and the Embarcadero Tourist Area from **August 29 to September 1, 2004**. See the NRC's Annual Congress & Expo web page ([www.nrc-recycle.org/congress](http://www.nrc-recycle.org/congress)) for more information.

If you want to find out more about how your city can start a venue

and event waste diversion program, visit the CIWMB's Waste Reduction at Venue Facilities and Large Events website at [www.ciwmb.ca.gov/venues](http://www.ciwmb.ca.gov/venues).

New on the website Planning page ([www.ciwmb.ca.gov/venues/Planning/](http://www.ciwmb.ca.gov/venues/Planning/)) this month are direct links to the Environmental Management Systems used by some of the largest and most successful venue management companies in the world.

For questions about the CIWMB's large venue and event waste reduction project, please contact Chris Schmidle, CIWMB, at (916) 341-6210, or e-mail him at [cschmidl@ciwmb.ca.gov](mailto:cschmidl@ciwmb.ca.gov).

## Keep in touch!

To keep *infoCycling* reaching you in the manner you prefer (e-mail or mail), please contact me at (916) 341-6240 or at [twebb@ciwmb.ca.gov](mailto:twebb@ciwmb.ca.gov) if another person should be receiving *infoCycling* or if your e-mail address, mailing address, and/or phone number changes.

Thank you.

Tracy

## NDFE amendments

A nondisposal facility element (NDFE) is one of a jurisdiction's planning documents required by the California Integrated Waste Management Act (IWMA).

The NDFE identifies California Integrated Waste Management Board-permitted "nondisposal"

***Continued on next page***

## ***NDFE amendments, continued from page 4***

facilities used by a jurisdiction to help reach the IWMA's diversion mandates. Nondisposal facilities that require a solid waste facility permit (SWFP) are primarily materials recovery facilities (MRF) that accept mixed municipal solid waste, compost facilities, and transfer stations.

A jurisdiction's NDFE may also include other facilities not defined as nondisposal facilities, such as recycling centers and drop-off centers.

Discussed below are the CIWMB's requirements and guidelines regarding if and when a local jurisdiction's NDFE must be amended with respect to a proposed new or revised SWFP for a nondisposal facility.

Additionally, the references section at the conclusion of the article provides useful information regarding NDFE amendment requirements as well as links to CIWMB web pages relating to NDFEs.

Questions and answers related to NDFE amendment requirements and guidelines

### **1. What does a new or revised permit for a nondisposal facility have to do with a jurisdiction's NDFE?**

Public Resources Code (PRC) section 50001(a)(2) (<http://leginfo.ca.gov/cgi-bin/waisgate?WAISdocID=35025016789+0+0+0&WAIAction=retrieve>) requires that before a new nondisposal

facility that requires an SWFP can be established or before an existing nondisposal facility can be expanded in a jurisdiction, the proposed facility must be identified in the NDFE of the jurisdiction hosting the proposed facility.

Making a finding that a nondisposal facility and its location are identified in the NDFE of the jurisdiction hosting the facility is considered the *conformance finding step* of the permitting process. Conformance of a proposed nondisposal facility permit is limited to *location identification* in the NDFE.

### **2. What triggers a conformance finding?**

A proposed permit for a new nondisposal facility, a proposed permit revision for an additional nondisposal facility at an existing nondisposal or disposal facility, and a first time permit for an existing facility can trigger a conformance finding.

### **3. When is an NDFE amendment necessary?**

A jurisdiction's NDFE may need to be amended if:

- A jurisdiction is planning to site a nondisposal facility that requires an SWFP within its jurisdiction, and the facility and its location have not previously been identified in the jurisdiction's NDFE.

*Continued on page 6*

### *NDFE amendments, continued from page 5*

- A new nondisposal facility will be sited at the same location as an existing nondisposal facility, whether permitted separately, or included in a revised permit for the existing facility. An example of this would be a proposed change to an existing transfer station to also include a compost facility and/or a construction & demolition (C&D) processing facility at the site. In such cases, the CIWMB must make a finding as part of the permitting process that the proposed permit is in conformance with the host jurisdiction's NDFE.
- A new nondisposal facility will be sited at the same location as an existing disposal facility, whether permitted separately or included in a revised permit for the existing facility. An example of this would be a proposed change to an existing landfill to now also include a compost facility, and/or a C&D processing facility at the site. In such cases, the CIWMB must make a finding as part of the permitting process that the proposed permit (for the new nondisposal facility) is in conformance with the host jurisdiction's NDFE.

#### **4. When is an NDFE amendment not necessary?**

The CIWMB determined at its August 2002 CIWMB meeting that a "plain English" interpretation of PRC section 50001 (conformance findings) would also apply to nondisposal solid waste facilities

requiring an SWFP that are located at a solid waste facility and included in the facility's SWFP.

Included in the CIWMB's decision was a narrow exception for certain **existing** nondisposal activities sited at solid waste facilities. For example, certain existing chipping and grinding activities or concrete crushing activities that may not currently be permitted but may need to be permitted as a result of the CIWMB's composting regulations or its construction, demolition and inerts (C/D&I) regulations, may be exempted from the conformance finding process.

CIWMB agreed to an exception in certain cases where the conformance finding step of the permitting process will not be necessary. Therefore, the host jurisdiction's NDFE will not have to be amended to add the facility, if **all** of the following conditions for that SWFP are met:

- A proposed SWFP includes an existing nondisposal activity.
- The nondisposal activity is located on-site at a **disposal facility** that is identified in the applicable Countywide Siting Element (or NDFE if the activity is located at a transfer station). The Countywide Siting Element demonstrates ability to provide 15 years of permitted disposal capacity for all jurisdictions within the county or regional agency.

*Continued on next page*



*Keep reading  
to learn more  
about NDFE  
amendments.*

For a detailed definition of a Countywide Siting Element, go to the CIWMB's Local Government Glossary at [www.ciwmb.ca.gov/lgcentral/glossary.htm](http://www.ciwmb.ca.gov/lgcentral/glossary.htm).

The nondisposal activity would require a permit if it were located elsewhere.

- The nondisposal activity would require a permit only as a result of a revision to the CIWMB's C/D&I regulations, and not as a result of a change in the activity (for example, an increase in size or materials handled).
- The existing nondisposal activity was described within the disposal facility's Report of Facility Information (RFI) or Report of Disposal Site Information (RDSI) by August 20, 2002 (date of the CIWMB's decision). For information on the August 2002 CIWMB decision, see Conformance Findings Guidance under the references below. For more information on an RFI, go to [www.ciwmb.ca.gov/permittool/box/checkitems/rfi/default.htm](http://www.ciwmb.ca.gov/permittool/box/checkitems/rfi/default.htm). For more information on an RDSI, go to [www.ciwmb.ca.gov/permittool/box/CheckItems/RDSI/Checklist.htm](http://www.ciwmb.ca.gov/permittool/box/CheckItems/RDSI/Checklist.htm).

For more information on how this exemption could be applied, see: "Part 2. Exceptions to the Rule" at: [www.ciwmb.ca.gov/LGLibrary/Policy/NDFEGuide.htm](http://www.ciwmb.ca.gov/LGLibrary/Policy/NDFEGuide.htm).

**5. How is conformance determined; and what if the proposed permit is not in conformance?**

- To facilitate the process and to reduce potential delay in the consideration of a proposed SWFP, the permit applicant should contact the host jurisdiction for the nondisposal facility *as early as possible* in the permitting process regarding whether the proposed permit is in conformance with the current NDFE. For a list of official jurisdiction contacts, go to [www.ciwmb.ca.gov/OLA/Contacts.asp](http://www.ciwmb.ca.gov/OLA/Contacts.asp).
- The jurisdiction should contact their OLA representative (see [www.ciwmb.ca.gov/OLA/Contacts.asp](http://www.ciwmb.ca.gov/OLA/Contacts.asp)) to request an "early consultation" to determine whether the existing or proposed facility location is identified in the jurisdiction's NDFE.
- The CIWMB's Permitting & Inspection (P&I) staff prepares a conformance finding request for OLA staff when a proposed full or standardized permit is received by P&I for review and consideration by the CIWMB.
- If the nondisposal facility and its location are identified in the NDFE, OLA staff will make the finding that the facility is in conformance, and no amendment to the NDFE will be necessary.

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***NDFE amendments, continued from page 7***

- If the nondisposal facility and its location are **not** identified in the NDFE, OLA staff will make a finding that the proposed SWFP for that facility is not in conformance. In such cases, the host jurisdiction for the nondisposal facility must amend its NDFE to include the facility **prior** to the CIWMB concurring in the SWFP for the facility, or the CIWMB may object to the issuance of a permit.
    - CIWMB approval of the amended NDFE may occur at the same CIWMB meeting as consideration of the proposed permit.
    - To assist with the amendment process, OLA staff can provide to the jurisdiction contact the CIWMB's web-based guidance documents on how to amend an NDFE. For more information, see the web-based tools and information under the references below.
- days prior to the public hearing for the adoption of the amended NDFE.
3. The local governing body (for example, the city council, county board of supervisors, or a board of directors for a regional agency) must adopt the NDFE amendment, by resolution, at a public hearing **which has been publicly noticed by being published in a newspaper of general circulation at least three days** in advance of the hearing.
  4. **Cities and regional agencies** must transmit a copy of their amendment to the county for incorporation into the Countywide Integrated Waste Management Plan within 30 days of adoption. Likewise, **counties** must transmit a copy of their amendment to the cities in the county within 30 days of adoption of the amendment by the county.

For additional information on a Countywide Integrated Waste Management Plan, go to [www.leginfo.ca.gov/cgi-bin/displaycode?section=prc&group=41001-42000&file=41750-41751](http://www.leginfo.ca.gov/cgi-bin/displaycode?section=prc&group=41001-42000&file=41750-41751)).

**6. What are the basic steps for amending an NDFE?**

1. Prepare the NDFE amendment. This is a description of the proposed facility(s). For the content requirements of the facility description, see General Guidelines for Amending a Nondisposal Facility Element (NDFE) under the references below.
2. Present the NDFE amendment to the county's local task force (LTF) for comment at least 90
5. The amended NDFE and supporting documentation must be submitted to the CIWMB for consideration, and shall include:

***Continued on next page***



***NDFE amendments, continued from page 8***

- 1) Two copies of the amended NDFE (basically, the facility(s) description information).
- 2) Copy of LTF comments.
- 3) Copy of the public notice(s) for the hearing to consider adoption of the amended NDFE in the newspaper of general circulation.
- 4) Copy of adopted resolution approving the amendment.
6. The CIWMB has 30 days from receipt of the amended NDFE to determine its completeness. Once deemed complete, the CIWMB has 60 days to review and approve amendments.

**Note:** NDFEs are exempt from the California Environmental Quality Act (CEQA) process.

**References**

To further assist customers, information on conformance findings, general guidelines for amending an NDFE, and laws regarding NDFEs can be found on the following web pages:

**CIWMB's Permit Toolbox Pages on Conformance Finding**  
([www.ciwmb.ca.gov/permittoolbox/checkitems/conformfind/](http://www.ciwmb.ca.gov/permittoolbox/checkitems/conformfind/)) provide resources and guidance for SWFP applicants and local enforcement agencies for determining if a proposed SWFP is in conformance with the NDFE.

**Local Enforcement Agency Correspondence Regarding Conformance Findings Guidance**

([www.ciwmb.ca.gov/leamemo/2002/Conformance/guidance.htm](http://www.ciwmb.ca.gov/leamemo/2002/Conformance/guidance.htm)) provides information on the CIWMB's August 2002 decision regarding when a conformance finding is necessary, as well as example scenarios for a conformance finding.

**General Guidelines for Amending an NDFE**

([www.ciwmb.ca.gov/LGLibrary/Policy/NDFEGuide.htm](http://www.ciwmb.ca.gov/LGLibrary/Policy/NDFEGuide.htm)) provides procedural guidelines for amending an NDFE to identify the nondisposal facilities used by a jurisdiction to implement programs in its CIWMB-approved Source Reduction and Recycling Element (SRRE). Section I of the guidelines, "NDFEs and the Solid Waste Facility Permitting Process," discusses what change would trigger the need for an NDFE amendment.

Section II discusses the six steps in the amendment process and includes a table showing the required contents (facility descriptions) for NDFEs.

**PUBLIC RESOURCES CODE (PRC) section 41730**

([www.leginfo.ca.gov/cgi-bin/displaycode?section=prc&group=41001-42000&file=41730](http://www.leginfo.ca.gov/cgi-bin/displaycode?section=prc&group=41001-42000&file=41730)) provides information on a city's requirements relating to NDFEs.

**PUBLIC RESOURCES CODE (PRC) section 41731**

([www.leginfo.ca.gov/cgi-bin/displaycode?section=prc&group=41001-42000&file=41731](http://www.leginfo.ca.gov/cgi-bin/displaycode?section=prc&group=41001-42000&file=41731)) provides information on a county's requirements relating to NDFEs.

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**PUBLIC RESOURCES CODE (PRC) sections 41732-41736**  
([www.leginfo.ca.gov/cgi-bin/displaycode?section=prc&group=41001-42000&file=41732-41736](http://www.leginfo.ca.gov/cgi-bin/displaycode?section=prc&group=41001-42000&file=41732-41736)) provide information on the requirements for preparing and amending an NDFE.

**Title 14, California Code of Regulations (14 CCR): Chapter 9, Article 6.4, sections 18752-18754.5**  
([www.ciwmb.ca.gov/Regulations/Title14/ch9a63.htm#ch9ca6\\_4](http://www.ciwmb.ca.gov/Regulations/Title14/ch9a63.htm#ch9ca6_4)) provide information on the content requirements for an NDFE.

**14 CCR, Chapter 9, Article 7, sections 18765 through 18768**

([www.ciwmb.ca.gov/Regulations/Title14/ch9a7.htm](http://www.ciwmb.ca.gov/Regulations/Title14/ch9a7.htm))

provide information on the amendment or revision, and resubmittal of the amended or revised NDFE.

## Contacts

If you have additional questions regarding an NDFE amendment, contact your CIWMB OLA representative. For a listing of contacts, go to the CIWMB's Local Assistance Contacts web page at [www.ciwmb.ca.gov/OLA/Contacts.asp](http://www.ciwmb.ca.gov/OLA/Contacts.asp).

# State agencies make significant strides in meeting diversion mandates

Chapter 764, Statutes of 1999 (Strom-Martin, AB 75) took effect on January 1, 2000. This bill added provisions to the Public Resources Code, mandating that State agencies and large State facilities (State agencies) develop and implement an integrated waste management plan by July 1, 2000.

State agencies must divert at least 25 percent of their solid waste from landfills or transformation facilities by January 1, 2002, and divert 50 percent by January 1, 2004. For more information on the State agency waste diversion law

formerly known as AB 75, see [www.leginfo.ca.gov/pub/99-00/bill/asm/ab\\_0051-0100/ab\\_75\\_bill\\_19991010\\_chaptered.html](http://www.leginfo.ca.gov/pub/99-00/bill/asm/ab_0051-0100/ab_75_bill_19991010_chaptered.html).

State agencies have made significant strides in meeting diversion mandates since this bill took effect. Their hard work and dedication in establishing, overseeing, and maintaining successful diversion programs is paying off. Diversion programs some State agencies have established include:

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***State agency diversion, continued from page 10***

- **Composting:** xeriscaping, grasscycling, and self-haul green waste.
- **Facility Recovery:** materials recovery facility.
- **Hazardous Material:** batteries, used oil, and antifreeze.
- **Recycling:** beverage container, cardboard, office paper (mixed), scrap metal, and plastics.
- **Source Reduction:** materials exchange and business source reduction.
- **Special Waste:** scrap metal, concrete/asphalt/rubble (C&D), and wood waste.
- **Biomass.**

State agency diversion programs kept 595,184.85 tons of material out of landfills in 2002. The 2002 estimated diversion rate for all California's State agencies was 68.5 percent. As shown in the table below, the total diverted tons increased in 2002 from 2001, and the total disposed tons decreased in 2002 from 2001.

Year	Estimated Diversion (tons)	Reported Disposal (tons)	Estimated Diversion Rate (%)
2001	539, 526.8	305, 885.5	63.8 %
2002	595, 184.85	272, 959.3	68.5 %

Two examples of State agencies with steady increases in their diversion rates and successful diversion programs include:

**Los Angeles City College**

Los Angeles City College in Los Angeles had a diversion rate of 39.9 percent in 2001. In 2002, their diversion rate jumped to 66.5 percent, an increase of 26.6 percent. Los Angeles City College's actual tonnage for 2002 is shown in the diversion rate table and diversion summary pie chart below:

Diversion Rate Table	
Category	Tons
Diversion	480.9
Disposal	242.7
Generation	723.6
Diversion %	66.5%



*No Programs Proposed or Planned for Expansion*

***Continued on page 12***

## ***State agency diversion, continued from page 11***

### **40th District Agricultural Association**

The 40<sup>th</sup> District Agricultural Association in Woodland had a diversion rate of 45.2 percent in 2001. In 2002, their diversion rate jumped to 67.2 percent, an increase of 22 percent. The 40<sup>th</sup> District Agricultural Association's actual tonnage for 2002 is shown in the diversion rate table and diversion summary pie chart below.

Diversion Rate Table	
Category	Tons
Diversion	245.5
Disposal	120.0
Generation	365.5
Diversion %	67.2%



*No Programs Proposed or Planned for Expansion*

To learn about other State agency diversion programs and diversion rates, go to the CIWMB's State Organization and Agency Recycling Database at

[www.ciwmb.ca.gov/StateAgency/SOARD/](http://www.ciwmb.ca.gov/StateAgency/SOARD/).

In addition, if you want a custom report for the year 2001 or 2002 (for example, a report showing tons diverted for each material type at a State agency or a report grouping similar State agencies together in order to compare disposal and/or diverted tons, such as the prisons or fairs), contact your State agency assistance section representative.

### **2003 diversion rates and programs**

CIWMB staff is currently reviewing and verifying year 2003 data sent in by State agencies. If you have any questions regarding the status of the data you sent in, contact your State agency assistance section representative.

### **Contact information**

If you have questions about State agencies diversion mandates, rates, or programs, contact your State agency assistance section representative. Go to the State Agency web page ([www.ciwmb.ca.gov/StateAgency/contacts.htm](http://www.ciwmb.ca.gov/StateAgency/contacts.htm)) for a listing of the representatives or call (916) 341-6275.

## Could establishing a new base-year benefit your jurisdiction?

Do you believe your jurisdiction has already maximized its diversion programs and the diversion rate is not reflecting these efforts? Have the characteristics and/or waste-shed of your jurisdiction changed significantly since the base-year? If one or more of these are true, your jurisdiction may want to consider establishing a new base-year.

Although some jurisdictions may still need to focus on improving their diversion programs, others could benefit from conducting a generation study to establish a new, more current base-year. One or more of the reasons listed below could indicate inaccuracies in a jurisdiction's base-year that may warrant consideration for establishing a new base-year:

- Full implementation of programs resulting in a low waste diversion rate.
- Negative waste diversion rate.
- Original base-year disposal tonnage allocations may not have been accurate (for example, original disposal tonnage amounts were estimated due to lack of scales).

- Significant change in the demographics (for example, significant increase in industrial waste generators while commercial and residential waste generators increased only slightly).

To assist jurisdictions, the CIWMB is providing examples of jurisdictions that established a new base-year successfully. With the disposal reporting system in place and the development of other types of tracking systems, a focused generation study can be conducted much more efficiently at less cost than the original base-year studies.

Look for future editions of *infoCycling* with more examples of jurisdictions that have successfully established new base-years.

### Santa Barbara County

The unincorporated area of Santa Barbara County, a community with a population of 174,100, had implemented diversion programs such as residential curbside collection of recyclables and green waste, commercial on-site collection of recyclables and green waste, recycling of construction and demolition debris, on-site collection of recyclables at schools, reduce, reuse, and recycle educational programs at schools, recycling collection at all county buildings, white goods drop-off, and collection of residential waste that they anticipated would help them achieve a 50 percent diversion rate by 2000.

In the year 2000, the CIWMB's default diversion rate for the

*Continued on page 14*

*Santa Barbara County's study helped them to identify program gaps and waste generators.*

### ***Establishing a new base-year, continued from page 13***

county was 47 percent. Due to the level of their program implementation efforts, the county suspected that their original base-year generation tons did not accurately capture diversion occurring within the county. The county found that establishing a new base-year was important in reflecting the county's current diversion efforts.

#### **Establishing a new base-year**

##### ***Step I-Disposal tons***

To establish a new base-year, the county began by verifying the accuracy of the disposal data reported to the CIWMB through quarterly disposal reports. The county is responsible for tracking and reporting all tons disposed at landfills located within the county, including county-owned, city-owned, privately-owned, and federally-owned and operated facilities.

The county tracks all landfilled tonnage daily and asks each customer coming through the scale house as to what jurisdiction the load is originating from. The county hopes that by using this method they can ensure an accurate method for tracking jurisdictional tons.

##### ***Step II-Diversion tons***

The county performed six areas of analysis to determine diversion activities taking place within the county. In some instances, the county was unable to quantify diversion because documentation for some diversion programs was unavailable, or it was not feasible

to differentiate diversion originating between the county and cities lying within the county.

The first area of diversion analyzed was facilities owned or operated by the county. Using a program called Compuweigh, material crossing the weigh stations is tracked by origin. Adjustments were then made to separate out city tonnages. These tonnages were then compared to tonnages provided by individual haulers/recyclers to further ensure there would be no duplication of diversion tons.

The county then looked at materials collected for diversion through a variety of programs. This analysis identified tons recycled and composted by both businesses and residents.

The programs analyzed included all franchise diversion under the curbside collection program, non-franchise diversion by recyclers and haulers that occurred county-wide outside of county facilities, diversion programs operating within other jurisdictions that diverted materials from the unincorporated areas of the county, and exports of material outside of county boundaries.

Calls and follow-up to contacts were made to verify information and eliminate duplication of diversion tons. The county also measured recycling and composting at the 20 largest businesses in the unincorporated area.

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### *Establishing a new base-year, continued from page 14*

Then the county eliminated duplication of diversion tons by crosschecking against hauler, landfill, and diversion facility tonnages.

Another area of diversion examined was source reduction. For purposes of the study, the top 30 percent of businesses that generated 70 percent of the waste were surveyed to assess types of source reduction. Also, the county quantified the grasscycling tonnage at the parks and facilities within the unincorporated area using a conversion factor. Diversion credits were calculated using sources recommended on the CIWMB website.

The fifth area of diversion examined was restricted waste diversion tonnage, including inert solids, scrap metals, agricultural wastes, and white goods. All of the above sources were contacted by phone and/or site visits to confirm restricted waste diversion tonnages.

Finally, the county looked at recycled materials that fall under the California Redemption Value (CRV). The Department of Conservation had no way of separating out materials that came from the incorporated versus unincorporated area; therefore, some extrapolation was used to calculate the diversion tonnage. The entire county's population was divided by the unincorporated population; this percentage was applied to the CRV totals for the entire county. In the end, the county decided not to include this as diversion since the

extrapolation method could be questionable.

## **Results**

The study helped the county to better understand all aspects of waste generation, identify program gaps and specific waste generators within the county, and better demonstrate the county's efforts in implementing diversion programs through a more accurate diversion rate.

The CIWMB approved the county's new base-year, and the county's diversion rate was approved by the CIWMB at 59 percent for the year 2000 at the August 2002 Board meeting. The county's CIWMB-approved diversion rate for the year 2001 was 60 percent, and the approved rate was 62 percent for the year 2002.

## **Questions**

If you have questions about the county's process in establishing a new base-year, please contact Jody Rundle of Santa Barbara County's Public Works Department, Solid Waste & Utilities Division, at (805) 882-3602, or [JRUNDLE@co.santa-barbara.ca.us](mailto:JRUNDLE@co.santa-barbara.ca.us). Or, contact Nikki Mizwinski in the CIWMB's Office of Local Assistance at (916) 341-6271, or [nmizwins@ciwmb.ca.gov](mailto:nmizwins@ciwmb.ca.gov).

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*City of Monterey's new base-year provides a better picture of waste generation.*

## City of Monterey

The City of Monterey is a community with a year-round resident population of approximately 34,000 people. The city population is augmented by a daily influx resulting from tourism as well as the inclusion of two military facilities within the city limits, for a total estimated population of 134,000.

The city implemented a comprehensive diversion program, including curbside recycling, curbside green waste and recycling drop-off sites, office recycling, recycled-content product procurement, commercial on-site pick-up, construction and demolition waste recycling, residential large item pick-up (for example, white goods, furniture, and hot water heaters), and on-site school recycling collection, to help them achieve a 50 percent diversion rate by 2000.

By the year 1998, however, the CIWMB's default diversion rate for the city was only 28 percent. This low diversion rate supported the city's perception that their original base-year generation tonnage did not accurately reflect the disposal or diversion originating within the city. Specifically, the city believed the base-year disposal data was underestimated as a result of reduced tourism after the 1989 Loma Prieta earthquake.

Additionally, the base-year diversion data was limited to that captured through the Monterey Regional Waste Management District (MRWMD) and did not

reflect other waste reduction activities occurring within the community such as efforts by large generators including the Department of the Army's Presidio of Monterey, the Naval Postgraduate School, and the Navy's Fleet Numeric installation.

As a result, the city felt that establishing a new base-year was critical to developing a more precise picture of the city's current diversion efforts.

## Establishing a new base-year

### *Step 1 – Disposal tons*

The city began the process of establishing a new base-year by investigating the accuracy of their disposal tonnage data. In addition to auditing landfill records, the city contacted the hauler, the city public works staff, and self-haulers to confirm that the reported disposal tonnage for the new base-year (1998) and the two preceding report years (that is, 1996 and 1997) originated from the city.

Because the city and county have the same name, it was of particular importance to ensure that disposal tons for the unincorporated area that surrounds the city were not inadvertently allocated to the city. From their investigation, the city was able to substantiate the accuracy of its new base-year disposal data.

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**Step II – Diversion tons**

To determine its diversion tonnage, the city first performed a “big picture” evaluation of the waste reduction activities within the community. For example, the city collected diversion tonnage from local service providers such as the following:

- Monterey City Disposal Service, residential/commercial disposal and recycling contractor.
- Materials recovery facility at MRWMD for both residential and commercial self-haul reuse and recycling.
- Tallow company.
- Reusable diaper service.
- Buy-back centers through the Department of Conservation’s Division of Recycling.

Additionally, to estimate the diversion tonnage resulting from grasscycling at its large turf areas such as parks, school districts, and golf courses, the city ascertained the mowable acres grasscycled and applied CIWMB-approved conversion factors.

To view the conversion factor tables used, go to the Diversion Study Guide, Appendix I Conversion Factor Sources web page at [www.ciwmb.ca.gov/LGLibrary/DSG/AppendixI.htm](http://www.ciwmb.ca.gov/LGLibrary/DSG/AppendixI.htm).

Next, the city surveyed the largest 111 businesses, agencies, and institutions, determined based on employment, including the city, to estimate their source reduction,

recycling and composting activities not already identified and quantified through the previously mentioned “big picture” diversion evaluation.

It is important to note, that as a part of this survey process, the city quantified substantial diversion tonnage related to its aggressive recycling programs, including a significant amount of construction and demolition (C&D) debris resulting from its C&D recycling ordinance and related programs.

After surveying its largest nonresidential generators, the city noticed that they were beginning to reach a “point of diminishing return.” Specifically, the city was realizing 1 or less diversion tons for each additional diversion survey completed.

Considering its available resources with respect to the potential benefit of conducting additional surveys, the city concluded that the diversion data collected from its top 111 businesses, agencies, and institutions—combined with that quantified in its “big picture” diversion evaluation—adequately represented the diversion from both the residential and nonresidential sectors.

Lastly, in terms of quality control, the city made a number of efforts to substantiate the accuracy and representativeness of the diversion data included in the study.

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### ***Establishing a new base-year, continued from page 17***

For example, as described earlier, city representatives only included diversion data from the nonresidential diversion surveys that were not already captured in the “big picture” diversion evaluation to avoid instances of double counting.

Additionally, 25,318 tons of construction debris recycling reported by the Naval Postgraduate School in 1998 was not included in the new base-year. The reason is that this debris was the result of one unusually large demolition project (that is, not representative of a typical year).

### **Results**

Using the new base-year data, the CIWMB approved the city's 1998 diversion rate at 54 percent at the November 1999 Board meeting. The city's CIWMB-approved diversion rate for the year 1999 was 60 percent. The year 2000 was 65 percent, 2001 was 66 percent, and 2002 was 64 percent.

In addition to helping the city better demonstrate its efforts in implementing diversion programs

through a more accurate diversion rate, the new base-year generation study also helped the city to better understand all aspects of waste generation, identify diversion program gaps, and identify specific waste generators within the city.

### **Questions**

If you have questions about the city's process in establishing a new base-year, please contact Angela Brantley, City of Monterey, at (831) 646-5662, or [brantley@ci.monterey.ca.us](mailto:brantley@ci.monterey.ca.us). Or, contact Terri Edwards in the CIWMB's Office of Local Assistance at (916) 341-6733, or [tedwards@ciwmb.ca.gov](mailto:tedwards@ciwmb.ca.gov).

### **Contact Information**

To see if establishing a new base-year is the best option for you, contact your CIWMB Office of Local Assistance (OLA) representative. For a listing of contacts, go to the CIWMB's Local Assistance Contacts web page at [www.ciwmb.ca.gov/OLA/Contacts.asp](http://www.ciwmb.ca.gov/OLA/Contacts.asp).

## **Editor's note**

I hope you enjoyed this edition of *infoCycling*. Look for more articles on the CIWMB's Waste Characterization Study and jurisdiction success stories in future editions of *infoCycling*.

Please contact me with suggestions on articles you would

like to see included in *infoCycling* and announcements of events in your jurisdiction or at your State agency. You can reach me at (916) 341-6240 or at [twebb@ciwmb.ca.gov](mailto:twebb@ciwmb.ca.gov).

Thank you.

Tracy